

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1 - 18 (Canceled)

19. An object-oriented computing system, comprising:
a data file structure stored in a memory which contains an identification of objects in a software program, properties and handlers associated with respective objects, pointers to ancestor objects from which a given object inherits properties and handlers, and pointers to descendant objects which inherit properties and handlers from a given object;
a user interface via which a user selects an object and which displays ancestor objects and descendant objects for the selected object, the user interface configured to enable a user to indicate a change in relationship between a selected object and at least two ancestor objects or at least one descendant object, wherein said change comprises a change in inherited attributes associated with said selected object and for indicating a change for modifying one or more pointers associated with the selected object in said data file structure to correspond to said change.

20. (New) The object-oriented system of claim 19 wherein said indicated change is the addition of a new object as an ancestor object, and wherein said user interface is responsive to said indicated change to add a new object to said data file structure and to add a pointer to the selected object which points to said new object.

21. (New) The object-oriented system of claim 19 wherein said indicated change is the splicing of an object between the selected object and an ancestor object, and wherein said user interface is responsive to said indicated change to change a pointer associated with the selected object from one which points to the ancestor object to one which points to the spliced object.

22. (New) The object-oriented system of claim 21 wherein said user interface further changes a pointer associated with said ancestor object from one which points to the selected object to one which points to the spliced object.

23. (New) The object-oriented system of claim 19 wherein said user interface further enables a user to move selected properties and handlers from one object to another, and is responsive to such a move to change the association of properties and handlers in said data file structure from said one object to said other object in a corresponding manner.

24. (New) The object-oriented system of claim 19 wherein said data file structure comprises a database in which each object forms the basis for a record in the database, and each record contains fields which respectively identify the pointers, handlers and direct ancestor objects of the object with which the record is associated.

25. (New) The object-oriented system of claim 24 wherein each record also contains a field that identifies the direct descendant objects of the object with which the record is associated.

26. (New) The object-oriented system of claim 19 wherein said user interface comprises:

a window that is displayed on a display device of the computer system, said window including:

- a first panel which identifies an object of interest,
- a second panel which identifies objects that are parent objects for the object of interest, and
- a third panel which identifies objects that are children objects for the object of interest.

27. (New) A user interface for designing the structure of objects in an object oriented computer system, comprising:

a window that is displayed on a display device of the computer system, said window including:

an inheritance viewer having:

a first panel which identifies an object of interest;

a second panel which identifies at least two objects that are parent objects for the object of interest; and

a third panel which identifies objects that are children objects for the object of interest;

wherein the inheritance overviewer enables a user to add or delete an object identified in one or more of said panels and for indicating the addition or deletion of an object to one of said panels for modifying the structure of said object-oriented computer system in a corresponding manner by changing inherited attributes associated with said object of interest in response to a user action.

28. (New) The user interface of claim 27 wherein said inheritance overviewer includes a cursor on said display device that is controlled by a user-activated input device.

29. (New) The user interface of claim 27 wherein said inheritance overviewer further enables a user to splice an object between the object of interest and its identified

parent objects and add a new level to the structure of the object-oriented system and insert an object at the new level.

30. (New) The user interface of claim 27 wherein said inheritance overviewer includes a menu of commands in said window via which a user controls to add or delete a parent or child object for an object of interest identified in said first panel.

31. (New) The user interface of claim 27 wherein said inheritance overviewer includes a drag-and-drop function via which a user can move identification of objects into, within and between any of said panels to modify relationships between objects.

32. (New) The user interface of claim 31 wherein said second panel identifies at least two objects that are parents of an object of interest, and wherein said drag-and-drop function enables a user to change a relative order of precedence among said parent objects.

33. (New) A computer-readable medium for redesigning the structure of an object-oriented program in a computer, the computer-readable medium containing a program with instructions that execute the following procedure:

storing a data file structure in a memory which identifies objects in said program, properties and handlers respectively associated with said objects, and parent objects from which a given object inherits properties and handlers;

displaying a user interface which identifies an object of interest, parent objects for said object of interest, and children objects which inherit properties and handlers from said object of interest;

indicating via said user interface a change in relationship between said object of interest and at least two parent objects or at least one child object for the object of interest, wherein said change in relationship comprises a change in inherited attributes associated with said object of interest; and

modifying said data file structure in response to said indication to identify said change in relationship.

34. (New) The computer-readable medium of claim 33 wherein said change in relationship is the addition of a new level to said structure, and wherein said modifying step includes the steps of adding an object to said data file structure, identifying at least one parent of the object of interest as a parent of the added object, and identifying the object of interest as a child of the added object.

35. (New) The computer-readable medium of claim 33 wherein said indicating step comprises the steps of dragging an indication of an object from one location on said user interface to a different location on said interface which is associated with a different relationship relative to the object of interest, and dropping the dragged indication at the different location to effect the change in relationship.

36. (New) The method of claim 35 wherein said interface identifies at least two parent objects for the object of interest, and said dragging and dropping steps comprise changing a relative order of precedence for said parent objects.